

**REMARKS**

Claims 1-22 are pending in this application. Claims 1 and 11 are independent claims. Claims 21 and 22 are new. Reconsideration and allowance of the present application are respectfully requested.

Applicant notes with appreciation the Examiner's acknowledgement that certified copies of all priority documents have been received by the USPTO.<sup>1</sup>

**Example Embodiment**

Applicant draws the Examiner's attention to at least Paragraph [0007] of Applicant's written description, as listed in the published application 2007/0122765 A1, which explains that a purpose of an embodiment of the present application is to provide a dental mirror that is both "self-cleaning and condensation-free".

**Drawings**

The Examiner objects to the drawings for failing to comply with 37 C.F.R. §1.84(p)(5) because FIG. 3 includes reference number 8, which is not mentioned in the description. Applicant amends the written description to fix this inconsistency.

**Specification**

Applicant amends Paragraph [0026], as listed in Applicant's published application, in order to provide a written description of reference number 8 as shown in FIG. 3.

---

<sup>1</sup> See November 6, 2007 Office Action Summary, Box 12.

**Rejections Under 35 U.S.C. § 103 – Invo in view of Keogh**

Claims 1-6 and 8-20 stand rejected under 35 U.S.C. §103(a) as being unpatentable over European Patent No. EP 0 314 657 (“Invo”) in view of U.S. Patent No. 2,228,169 (“Keogh”). This rejection is respectfully traversed.

With regard to independent claim 1, the Examiner asserts that Invo teaches all of the claim limitations with the exception that Invo “does not teach the reflecting surface of the mirror being passed through by an opening”.<sup>2</sup> The Examiner asserts that Keogh “teaches the reflecting surface of the mirror being passed through by an opening as illustrated in FIG. 3 (column 2, lines 6-8)”.<sup>3</sup> The Examiner asserts that it would have been obvious for a person of ordinary skill in the art “to modify Invo in view of Keogh in order to provide more freedom of movement and not create a blind spot as taught by Keogh (column 1, lines 32-34)”.<sup>4</sup> Applicant asserts that the combination of Invo and Keogh is improper as the combination causes Invo to be inoperable for its intended purpose. Furthermore, Applicant asserts that Keogh teaches away from Invo and Applicant’s independent claims 1 and 11.

The Federal Courts have determined that it is improper to combine two references when one reference makes the other “inoperable for its intended purpose”.<sup>5</sup> In the present case, Invo teaches a dental mirror attached to the end of a suction device, the mirror including slits located around the periphery of the mirror to remove air, liquid, and small particles from the outside of

---

<sup>2</sup> See Page 3 of the November 6<sup>th</sup> Office Action.

<sup>3</sup> *Id.*

<sup>4</sup> *Id.*

<sup>5</sup> See *In re Gordon*, 733 F.2d 900, 901 (C.A. Fed., 1984).

the mirror, as well as provided general suction for purposes of dental work. Applicant draws the Examiner's attention to column 4, lines 46-51 of Invo, which states the following:

It is of great importance that the flow is essentially *equally distributed over the entire periphery of the mirror*. Thus, it is important that the slits are *distributed over the entire periphery of the mirror* (except the shoulders) and are as uniform as possible. (emphasis added)

Invo is specific about teaching that the suction device shall provide *equally distributed suction over the periphery of the mirror*. The Examiner suggests combining Invo with Keogh, Keogh teaching a small diameter aperture in the center of a dental mirror that provides for the spraying of water, air, or other gaseous medium. Specifically, Keogh teaches one aperture in a mirror, the aperture being "*very much smaller than the aperture encountered in the ordinary dental syringe* usually employed to flush out cavities and it is much smaller than the apertures employed in previously proposed dental instruments of the same general type".<sup>6</sup> Applicant asserts that Keogh's one *small aperture* in the middle of the mirror for spraying liquid / gas is in contention with Invo's teaching of several *equally distributed slits around the periphery of the dental mirror* that provide uniform suction. The stated purpose of Invo's equally distributed slits is to prevent moisture and air/liquid bubble formation on the mirror.<sup>7</sup> Applicant asserts that a modification of Invo that replaces *equally distributed peripheral slits* with one *very small aperture*, makes Invo inoperable for its stated purpose of keeping the mirror clean, and is therefore an improper combination for 35 U.S.C. §103 purposes.

Additionally, Applicant asserts that Keogh teaches away from both Invo and Applicant's independent claims 1 and 11. Specifically, the purpose of Keogh's very small diameter aperture

---

<sup>6</sup> See column 4, lines 12-18 of Keogh.

<sup>7</sup> See Invo Abstract.

for spraying gas and liquid does not pertain to keeping a dental mirror clean. Keogh teaches spraying gas and liquid through a small aperture, the small aperture ensuring that the gas / liquid would be traveling at a high velocity. Applicant asserts Keogh's high velocity air / liquid spray would, if anything, make the mirror *less clean* due to water / debris splatter that would occur while the device is in use. Therefore, Applicant asserts that Keogh's use of an *air / liquid spray* through *a very small aperture* teaches away from the purpose of Invo, and Applicant's claim 1 and 2, which is to provide *suction* to a dental mirror *to ensure the mirror remains clean* during use.

For at least the reasons stated above related to independent claims 1 and 11, Applicant believes these claims to be patentable. For at least the same reasons related to dependent claims 2-6, 8-10 and 12-20, Applicant also believes these claims to be patentable. Therefore, Applicant respectfully requests that this rejection of claims 1-6 and 8-20 under 35 U.S.C. §103 be withdrawn.

**Rejections Under 35 U.S.C. § 103 – Invo in view of Keogh in further view of Hukuba**

Claim 7 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Invo in view of Keogh, in further view of U.S. Patent No. 4,212,105 ("Hukuba"). This rejection is respectfully traversed.

With regard to independent claim 1, Applicant asserts that even a cursory review of Hukuba does not make up for the deficiencies of Invo in view of Keogh, as Applicant submits that the Examiner's asserted combination of Invo in view of Keogh is improper and Keogh teaches away from Invo.

For at least the reasons stated above related to independent claim 1, Applicant believes that dependent claim 7 is patentable. Therefore, Applicant respectfully requests that this rejection of claim 7 under 35 U.S.C. §103 be withdrawn.

**New Claims**

Applicant adds new claims 21 and 22. The written specification basis for this claim can be found in at least Paragraph [0012] of Applicant's published application.


**CONCLUSION**

In view of the above remarks and amendments, Applicant respectfully submits that each of the rejections has been addressed and overcome, placing the present application in condition for allowance. A notice to that effect is respectfully requested. If the Examiner believes that personal communication will expedite prosecution of this application, the Examiner is invited to contact the undersigned.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Donald J. Daley at the telephone number of the undersigned below.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 08-0750 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17; particularly, extension of time fees.

Respectfully submitted,  
HARNESS, DICKEY, & PIERCE, P.L.C.

By   
Donald J. Daley, Reg. No. 34,313

P.O. Box 8910  
Reston, Virginia 20195  
(703) 668-8000

  
DJD/CES/cm